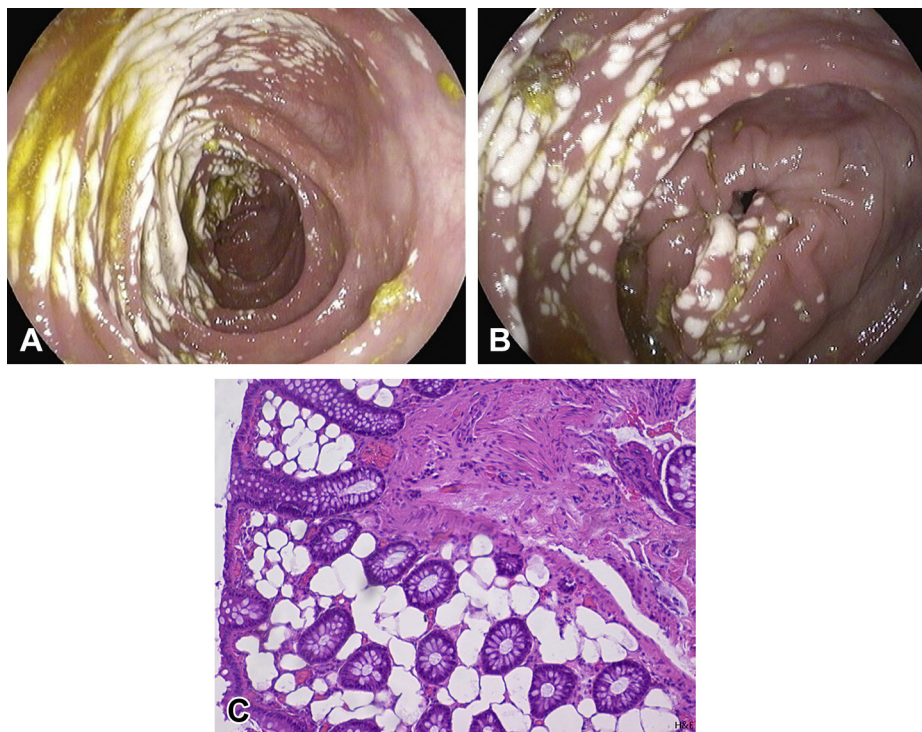


Colonic pseudolipomatosis



A 47-year-old male patient underwent colonoscopy to investigate chronic diarrhea. He had never undergone a GI endoscopy examination and had no evidence of infection based on clinical and pathological criteria. The endoscopic examination showed multiple slightly elevated whitish plaques on the ascending colon (A, B). Histopathological examination revealed optically empty coalescent vacuoles resembling fat within the lamina propria, between the glands, without foreign-body giant cell reaction, which fits colonic pseudolipomatosis (C).

The patient took a course of probiotics for 15 days, after which he was asymptomatic.

DISCLOSURE

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Commentary

Greek (*pseudes*: false; *lipos*: fat; *oma*: tumor; *osis*: a state of disease). Colonic pseudolipomatosis is a benign, rare, and usually asymptomatic condition. The estimated prevalence is 0.02% to 0.3% in a colonoscopy series. It is more common in the sixth and seventh decades of life.

Its etiology is unclear, although some believe the mucosal lesions are from barotrauma. Contrary to the case presented with diarrhea and a lesion in the ascending colon, there are 25 asymptomatic cases on PubMed, mostly reported on the left side of the colon. Pseudolipomatosis has also been reported in the rectum (noted during retrieval of colonoscope), skin, duodenum, stomach (thought to be from barotrauma in the setting of atrophic gastritis), endometrium (tissue sample thought to be from suction artifact), oral mucosa (suction artifact), and nasal mucosa (typical findings described on microscopy).

Other reported culprits are chemical injury from disinfectants used on the colonoscope, extravasation of lymph into lamina propria, or stasis of intestinal fluid.

A case series of 12 colonic pseudolipomatosis from an endoscopy unit were reported in an endemic fashion within a year (incidence of 0.94%) when they changed the endoscopic disinfectant from 2% glutaraldehyde to peracetic acid to decrease the length of the endoscope reprocessing time. It was assumed that the finding was from chemical colitis secondary to residual disinfectant on the surface or channel of the endoscope. Another group described it as a “snow white sign” in which instantaneous effervescence and blanching were observed on the colonic mucosa when water was instilled in the colon; this was thought to be from the hydrogen peroxide and/or peracetic acid present in the water channel. In both series, all patients were asymptomatic after the procedures.

At endoscopy, it looks like focal leukoplakia, single or multiple, a few millimeters to a few centimeters in size, some confluent with normal mucosa in between. The diagnosis is confirmed by immunohistochemistry, which shows numerous optically empty vacuoles measuring 20 to 240 μm , displacing the adjacent lamina propria. These changes, suggestive of fat cells without nuclei or fat content, are thought to be iatrogenic (filled with air) in the absence of inflammation and dysplasia. In a study, colonic pseudolipomatosis was attributed to either abnormal stagnation of interstitial fluid or penetration of gas from the crypts into the mucosa during colonoscopy. The differential diagnosis includes colonic pneumatosis, lymphangioma, and malakoplakia.

Spontaneous resolution after conservative management is seen within weeks. Therefore, its correct recognition should prevent unnecessary investigations and treatment. Proposed etiologies are still divided between barotrauma and chemical injury.

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